

Virginia Department of Education
Office of Special Education and Student Services

Guidelines for Working with Students Who Are Blind or Visually Impaired in Virginia Public Schools

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Preface and Acknowledgments

The Guidelines for Working with Students Who Are Blind or Visually Impaired in Virginia Public Schools is an adaptation of Educating Students With Visual Impairments in Texas: Guidelines and Standards, published in 2008, with sections added from Program Planning and Evaluation for Blind and Visually Impaired Students: National Guidelines for Educational Excellence ("National Guidelines"), published in 1989. The National Guidelines were based on Program Guidelines for Visually Impaired Individuals, published in 1986 by the California Department of Education and revised in 1987.

References to federal law have been updated in this document to reflect the *Individuals with Disabilities Education Improvement Act of 2004* ("IDEA 2004"), effective July 1, 2005, at 20 U.S.C. § 1400 et seq., and the 2006 implementing Part B Regulations, effective August 14, 2006, at 34 C.F.R. Part 300 (*Assistance to States for the Education of Children With Disabilities*). In this document citations are often made to the relevant section of the 2006 Part B Regulations, rather than the statutory provision under which the regulation was promulgated. This is because the 2006 federal regulations incorporate all of the provisions of the statute.

References to the *Regulations Governing Special Education Programs for Children with Disabilities in Virginia* ("Virginia Regulations"), effective July 7, 2009, at 8 VAC 20-81-10 et seq., have been added. The revised Virginia Regulations can be found at *http://www.doe.virginia.gov/VDOE/Instruction/Sped/varegs.pdf*. Resources and information specific to Virginia are also included in this document.

Quotations citing "NASDSE, 1999" refer to the most recently published guidelines, *Blind and Visually Impaired Students: Educational Service Guidelines,* by the National Association of State Directors of Special Education (NASDSE).

The purpose of the *Guidelines for Working with Students Who Are Blind or Visually Impaired in Virginia Public Schools* is to provide information for the provision of services to students who are blind or visually impaired to support their educational goals. These Guidelines provide a resource of suggestions for implementing services; they are not regulatory. They are written for any individual interested in serving the academic needs of students who are blind or visually impaired. These Guidelines will be modified and updated as needed on the Virginia Department of Education (VDOE) Web site at *www.doe.virginia.gov*.

The VDOE would like to thank the following individuals for their contribution of time and expertise in the development of this document:

Committee

Chairperson, Content Editor: Deborah L. Pfeiffer, Ed.D.

Specialist, Instructional Support and Related Services

Virginia Department of Education

Steering Committee: John Eisenberg, M.Ed.

Director, Instructional Support and Related Services Virginia Department of Education

Kristine Neuber, M.Ed.

Assistive Technology Specialist Helen A. Kellar Institute for Human disAbilities

Peggy Sinclair-Morris, M.A.

Project Coordinator

VA Project for Children and Youth with Deaf-Blindness

Partnership for People with Disabilities

Glen Slonneger

Education Services Program Director Virginia Department for the Blind and Vision Impaired

Karen Trump, Ed.D.

Specialist, Instructional Support and Related Services

Virginia Department of Education

Consultants

Patricia Abrams, Ed.D.

Director, Special Education Instruction Services Virginia Department of Education

Scottie Alley, J.D.

Specialist, Office of Dispute Resolution and Administrative Services Virginia Department of Education

Joan Anderson, Ed.D.

Senior Director of Special Education Services Norfolk City Public Schools Secretary, Virginia Council of Administrators of Special Education

Lee Ann Armbruster, M.Ed.

Teacher of Blind and Vision Impaired Virginia Beach City Public Schools

Nancy Armstrong, Ed.D.

Superintendent

Virginia School for the Deaf and Blind, Staunton

Sam Arrington, M.A., CAS

Orientation and Mobility Specialist Supervisor, Homebound Services Virginia Beach City Public Schools

Mary K. Brown, M.Ed.

Teacher of the Blind and Visually Impaired Roanoke City Public Schools

Suzy Burke, M.Ed.

Teacher of the Blind and Visually Impaired Scott County/Lee County Public Schools

Susan S. Cobb, Ed.S.

Education Coordinator, Richmond Regional Office Virginia Department for the Blind and Vision Impaired

Carrie Cole

Teacher of the Blind and Visually Impaired Galax City Public Schools

Kimberly Coleman, M.S.

Teacher of the Blind and Visually Impaired Chesapeake City Public Schools

Cindy Deskins

Teacher of the Blind and Visually Impaired Tazewell County Public Schools

Laura Goade, Ed.D.

Director of Special Education Carroll County Public Schools

Missy Hall, M.Ed.

Teacher of the Blind and Visually Impaired Russell County Public Schools

Heidi V. Helmey M.Ed.

Teacher of the Blind and Visually Impaired Lynchburg City Public Schools

Sara Henry, M.Ed.

Teacher of the Blind and Visually Impaired Wythe County/Smyth County Public Schools

Dinah Hogston

Teacher of the Blind and Visually Impaired (retired)

Buchanan County Public Schools

Kate Jacob, M.Ed.

Teacher of the Blind and Visually Impaired Washington County/Bristol City Public Schools

Deborah Johnson, Ed.S.

Director of Special Education Essex County Public Schools

Cathy Lauver

Teacher of the Blind and Visually Impaired Roanoke City Public Schools

Donna Mayberry, M.Ed.

Teacher of the Blind and Visually Impaired Lynchburg City Public Schools

Marian McHugh, M.S.

Teacher of the Blind and Visually Impaired Salem City Public Schools

Bonnie S. Owens, M.Ed.

Teacher of the Blind and Visually Impaired Wise County/Dickenson County Public Schools

Julienne B. Parker, M.Ed.

Teacher of the Blind and Visually Impaired Danville City Public Schools

Judy Parks, M.Ed.

Teacher of the Blind and Visually Impaired Grayson County Public Schools

Dawn Peifer

Parent

President of Virginia Association for Parents of Children with Visual Impairments

Deborah Prost, M.Ed.

Teacher of the Blind and Visually Impaired Chesapeake City Public Schools

Susan Ribyat, M.Ed.

Teacher of the Blind and Visually Impaired Fairfax County Public Schools

Judy Sorrell

Director

Shenandoah Valley Regional Program

Shannon Sullivan, M.Ed.

Teacher of the Blind and Visually Impaired Arlington County Public Schools

Mary Swanick, M.Ed.

Teacher of the Blind and Visually Impaired Lynchburg City Public Schools

Wyllys VanDerwerker

Director of Special Education Lynchburg City Public Schools President, Virginia Council of Administrators of Special Education

Karen B. Walker, M.Ed.

Teacher of the Blind and Visually Impaired/ Orientation and Mobility Specialist Independent Contractor

Marylou Wall

Executive Director

Virginia Council of Administrators of Special Education

Cindy Wenrich, M.Ed.

Teacher of the Blind and Visually Impaired/ Orientation and Mobility Specialist Pulaski County Public Schools

Special thanks to Scottie Alley, J.D., Specialist from the Office of Dispute Resolution and Administrative Services at the Virginia Department of Education, for her time and expertise in editing the content and format of this document.

Key to Acronyms and Abbreviations Used in this Document

AIM-VA Accessible Instructional Materials Center of Virginia

DBVI Virginia Department for the Blind and Vision Impaired

ECC Expanded Core Curriculum

FVA Functional Vision Assessment

IDEA 2004 Individuals with Disabilities Education Improvement Act of 2004

IEP Individualized Education Program

IFSP Individualized Family Service Plan

LMA Learning Media Assessment

LRE Least Restrictive Environment

NASDSE National Association of State Directors of Special Education

NCLB No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008)

NLTS2 National Longitudinal Transition Study 2

NIMAS National Instructional Materials Accessibility Standards

O&M Orientation and Mobility

OSERS Office of Special Education and Rehabilitative Services

TBVI Teacher(s) of Students Who Are Blind or Visually Impaired

VDOE Virginia Department of Education

I. Unique Educational Needs of Students Who Are Blind or Visually Impaired

Maximizing lifelong success is the goal of education. Students with visual impairments have unique learning needs that must be addressed if they are to access the general education core curriculum and become independent, productive citizens. Recent data indicate that only approximately 28 percent of out-of-school youth with visual impairments are employed (Cameto and Nagle, 2007). Thus, educators face a significant challenge in providing educational services that will enhance successful post-school outcomes.

Making appropriate decisions about the development and implementation of programs and services for students with visual impairments requires a clear understanding of their unique learning needs and the interventions necessary to develop successful transition goals for adult independence. Administrators must have knowledge about specialized personnel, materials, equipment and educational settings to ensure appropriate individual educational program planning for this unique student population. See Section VI and Appendix A.



The unique needs of students who are blind or visually impaired are listed in the outline below and in Appendix A. This information can be used as a general framework for assessing each student with a visual impairment and for planning and providing instruction and services to meet the assessed needs. Assessment and provision of services are addressed in the following sections of these Guidelines.

Students with visual impairments are a heterogeneous group. Some have mild vision impairments while others are totally blind. Some have visual impairment as their only disability, while others have additional sensory, cognitive and/or physical challenges. Some students were sighted at one time, while others have never had vision.

Of the many ways that impaired vision affects learning, the three that have the most impact on education are:

- Need for experiential learning. Even before sighted babies learn to crawl, they watch and visually organize their world. They begin to categorize objects in their environment as large or small, same or different, rough or smooth. They attempt to find a way to come into contact with objects out of arms' reach. When a child has a vision impairment, he or she often depends on the intervention of parents, teachers, and others to experience objects that are not within reach. A system for organizing the environment can occur, but only with the assistance of knowledgeable parents and teachers.
- Development of alternative skills. Most areas of the public school curriculum have been developed with sighted students in mind. Modifications and accommodations, such as instruction in reading and writing through Braille, using optical devices with standard print, using auditory materials for learning, and reading tactual graphics, can be made so that students who are blind or visually impaired have access to the general curriculum.
- Learning to access information that is acquired casually and incidentally by sighted learners. In addition to the general education that all students receive, students with visual impairments, starting at birth, need an expanded core curriculum (ECC) to meet needs directly related to their vision disability (NASDSE, 1999). These expanded curriculum areas include instruction in such areas as social interaction skills, orientation and mobility (O&M) skills, and independent living skills. See Section VI for more information on ECC.

IIThe Population of Students Who Are Blind or Visually Impaired

As provided in the federal and state regulations, a "visual impairment including blindness" means an "impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes both partial sight and blindness." 34 CFR 300.8(c)(13); 8 VAC 20-81-10.

The term "blind and visually impaired" is used in this document to acknowledge that all individuals who are blind are visually impaired, but that all individuals with visual impairments are not blind.

"A student with deaf-blindness" is one who has been determined to meet the criteria for deaf-blindness.

"Deaf-blindness" means "simultaneous hearing and visual impairment, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness." 34 CFR, §300.8(c)(2); 8 VAC 20-80-10.

In 2008, children and youth with visual impairments including blindness comprised less than 0.8 percent of those, ages 2 through 21, who received special education services in Virginia. Specifically, 567 students had visual impairment (VI) as their primary disability; 476 as their secondary disability; and 281 as their tertiary. Most (98 percent) of the 1,324 students categorized as VI attended regular public schools. Fifty-seven percent of Virginia's students with visual impairments including blindness have at least one coexisting disability.

The population of students with visual impairments is very diverse. They:

- may be totally blind or have varying degrees of low vision;
- range from 2 to 22 years of age;
- may be born with a visual impairment or may have acquired a visual impairment at a later time in their lives;
- may or may not be learners on the academic level of their sighted peers;
- may have a stable or degenerative visual impairment;
- may have any number of other disabilities (mild to severe cognitive impairment, physical disabilities, mental health, emotional or behavioral problems, autism and/or learning disabilities) or have hearing impairments (deaf-blindness);
- may have a visual impairment in any part of the eye structure due to neurological causes (such as cortical visual impairment);
- may have families who speak a language other than English; or
- may have additional medical needs and considerations.

Adaptation to vision loss is shaped by many factors such as (1) availability and type of family support; and (2) degree of intellectual, emotional, physical, and motor functioning. Therefore, in addition to the nature and extent of vision loss, a variety of factors needs to be considered in designing an appropriate educational program for a child who is blind or visually impaired, and these factors may change over time (Riley, 2000).

III.Identification and Referral

A. Early Intervention Program (Part C)

When a child, age birth through two years, with a visual impairment is identified, referral can be made to Virginia's early intervention program. The program operates within the Virginia Department of Behavioral Health and Developmental Services and is called the Infant and Toddler Connection of Virginia. See *www.infantva.org*. Part C of IDEA 2004 provides early childhood intervention services for children with disabilities birth through two years of age. 34 CFR § 303.16. If a child with a visual impairment meets criteria for early intervention services, an Individualized Family Service Plan (IFSP), including family support services, nutrition services, and case management, is developed. An IFSP is similar to an Individualized Education Program (IEP) in both content and procedure and may be used as the child's IEP if it meets the content requirements of Part B. 20 U.S.C. 1436.

B. Child Find

Part B of IDEA 2004 mandates services to be provided by the schools for students with disabilities, ages three through 21, inclusive; in Virginia, Part B services are provided for students with disabilities ages two through 21, inclusive. Should the family choose to transition from Part C to public school services, the child must meet the two-year-old age requirement for transition and other regulatory requirements. When a child is determined eligible for special education and related services, an IEP is developed.

Screening is part of the identification process. Each school division is responsible for having procedures, including timelines, to document the screening of children enrolled in the division, including transfers from out of state. Vision screening and eye examination are essential for detecting visual impairment. Vision must be screened for all children within 60 days of the beginning of the school year for grades three, seven and ten, and within 60 days of initial enrollment. If the results of a screening suggest that a child should be evaluated for special education and related services, he or she will be referred to the special education administrator or designee. See http://www.doe.virginia.gov/support/health_medical/virginia_school_health_guidelines/early_periodic_screening.pdf for recommended testing procedures, referral, and follow-up process.

Each school establishes a school-based team to process referral requests for children suspected of having a disability. Additionally, a teacher or other person may request an evaluation by contacting the special education administrator. If a school-based team suspects a disability, it must refer the child to the special education administrator or designee within three business days.



IV.Evaluation of Students with Visual Impairments

A. Initial Evaluation

Evaluation means procedures used to determine whether the child has a disability and the nature and extent of the special education and related services that the child needs. Federal regulations, at 34 CFR §300.304(c)(4), and the Virginia Regulations, at 8 VAC 20-81-70 C.14, provide, in pertinent part, that the child must be assessed in all areas related to the suspected disability including, if appropriate, vision. Additionally, at 34 CFR §300.304(c)(6), and at 8 VAC 20-81-70 C.9, the federal and state regulations provide that "the evaluation...[must be] sufficiently comprehensive to identify all of the child's special education and related services needs." For more specific information about referral, evaluation, and identification of students with disabilities in Virginia public schools, see *Guidance on Evaluation and Eligibility for the Special Education Process* (VDOE, 2009).

There are a variety of assessment tools that can be used during an evaluation. These tools should be used to gather information about the child in the functional, developmental, and academic areas. Virginia special education regulations require that assessments be technically sound and administered by qualified professionals. During initial and subsequent evaluations, the Teacher of the Blind and Visually Impaired (TBVI) can provide input that will help to ensure the use of appropriate evaluation tools and methods, and analyze evaluation results as they relate to visual impairments. Collaboration with a TBVI also assures that the needs of the student are recognized during the assessment procedure and that the information acquired through the assessments accurately reflects the student's ability (NASDSE, 1999).

Functional Vision Assessment (FVA). As a part of an initial evaluation, the TBVI conducts a FVA to analyze how a student actually performs visually in a variety of environments, both familiar and unfamiliar. The FVA includes a functional evaluation of behavioral abnormalities, peripheral fields, color and contrast discrimination, light sensitivity and preference, and near and distance acuity and discrimination with recommendations for instruction and accommodations. Input from an Orientation and Mobility (O&M) specialist as part of the FVA may include recommendations concerning the need for instructional services for current and future mobility needs.

Clinical Low Vision Evaluation. Results of the FVA may indicate the need for a clinical low vision evaluation. Eye care specialists (e.g., ophthalmologists, optometrists) with specialized training in low vision may conduct clinical low vision evaluations and prescribe low vision devices if needed. If the team, based upon the recommendation of the FVA results, agrees to the need for a clinical low vision evaluation, a TBVI from the school division should request one through the Virginia Department for the Blind and Vision Impaired (DBVI). See http://www.vdbvi.org/LowVisionServices.htm. Results of a clinical low vision evaluation may further assist the group in determining eligibility.

Learning Media Assessment (LMA). A LMA can be conducted to determine if specific visual, tactual, and/or auditory learning media are appropriate for a student.

B. Reevaluation

At least every three years, the school must reevaluate each child with a disability, unless the parent and the school agree that a reevaluation is not needed. A child may be reevaluated more often if the parent or teacher requests it, if there is reason to reevaluate to determine whether the child is still a child with a disability, or to determine his or her educational needs. A school may not conduct a reevaluation more than once a year unless the parent and school agree that it is needed.

The reevaluation is similar to the initial evaluation in terms of the process. For students with visual impairment, there are significant changes in demands on visual and sensory functioning as they grow older. It is important to monitor progress to determine how a student is functioning in new environments

and whether new evaluations are needed. To assess the student's ongoing educational needs, the TBVI and O&M specialist, as appropriate, can:

- perform the FVA and the LMA to determine appropriate modifications and accommodations for instruction;
- conduct O&M evaluations to establish or reevaluate the need for orientation and mobility instruction;
- evaluate the mastery of appropriate ECC goals; and
- use all data to develop appropriate program recommendations.

V. Eligibility

Once the evaluations are completed, a decision is made to determine whether the child is or continues to be a child with a disability and in need of special education and related services. Based on the results of the above evaluations and multiple sources of information, the eligibility group may determine that a child has a visual impairment if the following criteria are met:

- The definition of "visual impairment" is met in accordance with 8 VAC 20-81-10;
- There is an adverse effect on the child's educational performance due to one or more documented characteristics of visual impairment; and
- The child
 - demonstrates the characteristics of blindness or visual impairment, as outlined below; or
 - has any of the conditions, including, but not limited to, oculomotor apraxia, cortical visual impairment, and/or a progressive loss of vision, which may in the future have an adverse effect on educational performance, or a functional vision loss where field and acuity deficits



alone may not meet the aforementioned criteria.

A child with blindness demonstrates the following:

- visual acuity in the better eye with best possible correction of 20/200 or less at distance or near; or
- visual field restriction in the better eye of remaining visual field of 20 degrees or less.

A child with a visual impairment demonstrates the following:

- visual acuity better than 20/200 but worse than 20/70 at distance and/or near; or
- visual field restriction in the better eye of remaining visual field of 70 degrees or less but better than 20 degrees. 8 VAC 20- 81-80.

The term "visual impairment" does not include children who have learning problems that are primarily the result of visual-motor or perceptual difficulties, although visually impaired students may also have these additional difficulties. Teams must consider recommendations provided by medical professionals for eligibility and services. Careful consideration of all assessment information related to visual dysfunction and input from other professionals (e.g., occupational therapists) support the IEP team in the development of appropriate educational interventions.

For students who are deaf-blind, there are specific additional criteria for eligibility in both visual and auditory impairment.

"Eligibility as a child with deaf-blindness. The group may determine that a child has deaf-blindness if the definition of `deaf-blindness' as outlined in 8 VAC 20-81-10 is met." 8 VAC 20-81-80 K.

"`Deaf-blindness' means simultaneous hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness." 34 CFR §300.8 (c)(2); 8 VAC 20-81-10.

The child's IEP team must develop an IEP within 30 days after the child has been determined to exhibit a disability which meets criteria for eligibility under special education law and regulations. 8 VAC 20-81-110 B.2. The purpose of the IEP is to provide a written statement for a child with a disability that specifies the individual educational needs of the child and what special education and related services are necessary to meet the child's educational needs. 8 VAC 20-81-10.

VI.

Addressing Instructional Needs of Students with Visual Impairments

Specialized Instruction and the IEP. Special education means specially designed instruction to meet the unique needs of a child with a disability; *related services* support the child in benefitting from special education.

Specialized instruction provided by a teacher of the blind and visually impaired to students found eligible with "visual impairment including blindness" is special education; this service should be documented on the IEP as specialized instruction rather than as a related service. Regardless of whether it is his or her primary, secondary, or tertiary disability, a child with a visual impairment requires specially designed instruction to ensure access to the general curriculum. Ensuring access to the general curriculum by adapting or helping the general education teacher adapt instructional strategies and the curriculum is a special education service. There is no federal or state definition of the term "vision services" despite its continued popular use. School personnel and IEP teams should be clear and specific about the services to be provided for a child from the TBVI and avoid use of the term "vision services."



Orientation and Mobility (O&M) training may be considered special education, or specially designed instruction, if it involves "travel training" of students who are blind or visually impaired provided by a professional certified in O&M. O&M may also be considered a related service. 8 VAC 20-81-10.

The Expanded Core Curriculum (ECC). For children who are blind or visually impaired, evaluations to document the present level of academic achievement and functional performance for the development of the IEP are required by IDEA 2004. The term ECC is used to define concepts and skills that are typically learned incidentally by sighted students and that must be sequentially presented to the student who is blind or has low vision. An ECC may include:

- needs that result from the visual impairment to enable the student "to be involved in and make progress in the general education curriculum; and
- other educational needs that result from the child's disability." 8 VAC 20-81-110 G.2.

The presence of a visual impairment requires that these skills be thoroughly evaluated and systematically taught to students by teachers with specialized expertise. Without specialized instruction, children with vision loss may not be aware of the activities of their peers or acquire other critical information about their surroundings (NASDSE, 1999).

As the IEP is being developed, the following knowledge and skills related to the ECC should be considered:

- Compensatory skills. Compensatory skills are needed to access the general curriculum.
 - Access to literacy through Braille and/or print, handwriting skills and auditory skills is required by the regulations implementing IDEA 2004, which state that, "In the case of a student who is blind or visually impaired, [the IEP team must] provide for instruction in Braille and the use of Braille unless the IEP team determines, after an evaluation of the child's reading and writing skills, needs, and appropriate reading and writing media (including evaluation of the child's future needs for instruction in Braille or the use of Braille), that instruction in Braille or the use of Braille is not appropriate for the child." 34 CFR §300.324(a)(2)(iii); 8 VAC 20-81-110 F.2.c. Many students with low vision use regular print with magnification devices. Some students need both print and Braille. Students with multiple disabilities, including deaf-blindness, may use a tactile or object symbol system for literacy.

- Communication needs will vary depending on degree of functional vision, effects of additional disabilities and the task to be done. Students with deaf-blindness and others may use alternative communication systems such as tactile sign language, symbol or object communication, or calendar boxes.
- Specialized instruction in concept development may be of significant importance when visual observation is limited. It is essential to offer specific and sequential hands-on, sensory-based lessons to build a broad base of experiences. In higher grades, there are many mathematical, geographical and scientific concepts that must be taught with adapted materials and strategies for students unable to learn from pictures and visual diagrams. A child with little or no vision may have fragmented understandings of the world without systematic tactile exploration and clear, verbal explanations. Some concepts are totally visual, such as colors, rainbows, clouds, and sky. Some are too large to experience completely, such as a building, mountain ranges, and oceans. Other items are too tiny or delicate to understand through touch, including small insects, a snowflake, or an item under a microscope. Some items are inappropriate to explore through touch such as wild animals or toxic substances. Fragmented concepts can impede social, academic, and vocational development. For information on the DBVI education program, see http://www.vdbvi.org/EduServices.htm.
- Sensory efficiency, including visual, tactual and auditory skills. Students who are blind and students with low vision need systematic instruction to learn efficient use of their senses.
 - Instruction in visual efficiency must be individually designed and may include using visual gaze to make choices, tracking car movements when crossing the street, responding to visual cues in the environment, and/or using optical devices such as magnifiers and telescopes.
 - → For most students with visual impairments, an increased reliance on tactual skills is essential to learning. These skills should be considered as part of IEP development. It takes more detailed "hands-on" interaction and repetition to tactually understand a concept, such as relative size, that may be readily captured with a glance by sighted individuals.
 - Systematic instruction in auditory skills may be needed for successful mobility and learning. Students must learn to effectively use their hearing to respond appropriately to social cues, travel safely in schools and across streets, learn from recorded media, and use echolocation for orientation.
- Orientation and Mobility. Safe and efficient travel throughout the environment is a critical component in the education of students with visual impairments. O&M evaluation and instruction should begin in infancy with basic spatial concepts and purposeful and exploratory movement. Instruction should then progress through more independent, age-appropriate motor and travel skills in increasingly complex environments. Vision provides the primary motivation for infants to begin to move their bodies, to raise their heads to see people, to reach toward objects, to move through the environment, and to begin to play. Significant delays and differences in meeting motor milestones can impact overall development. A child who is blind needs to know how classrooms or other environments are arranged in order to independently move with confidence. Systematic orientation to a space may be needed before placement and function of furniture and objects are familiar. More advanced age-appropriate travel skills, such as orientation to all school facilities, street crossings, bus travel, and community experiences, are needed as the student gets older. For information on the DBVI orientation and mobility services, see http://www.vdbvi.org/OMServices.htm.

- Skills in using assistive technology. Technology permits students with visual impairments to access the general curriculum, to increase literacy options, and to enhance communication. There are a variety of high- and low-tech assistive technology tools designed specifically for students with visual impairments that require specialized instruction. These devices include, but are not limited to, electronic Braille note takers, colored transparencies, tactile symbols, calendar systems, video magnifiers, screen reader software, screen enlarging software, Braille displays, auditory access to printed materials, and magnification devices.
- Social skills. A visual impairment can socially isolate a student, impede typical social interactions, or limit social skill development. A student with a visual impairment who is not able to see facial expressions and subtle body language to participate in conversations and activities may experience awkward and confusing interactions. Social skills that sighted children are able to observe and imitate may need to be taught to a child with a visual impairment. See http://www.vdbvi.org/RTILS.htm.
- Independent living skills. Home living, self-determination, vocational goals, community access skills, and appropriate interpersonal/social skills are critical for successful transition from school to independent living and employment. Young children begin learning basic skills in independent living from visual observation and imitation. Most students with visual impairments, however, will need systematic instruction and adaptations to standard equipment, such as modifications to read oven markings and to cook independently and safely. Depending on the level of vision, intellectual ability, and other unique characteristics of a student, adaptations may range from minor highlighting to tactile clues for matching clothing. Students can learn to apply make-up and perform other grooming activities with magnifying lenses, specially marked containers, and highlighted dials on electric shavers. These skills are not typically evaluated or taught in a sequential and systematic basis in general education settings. Family members may require assistance and guidance to implement the proper adaptations that will permit practice and mastery of new independence skills within the home. For information on the DBVI rehabilitation teaching/independent living services program, see http://www.vdbvi.org/RTILS.htm.
- Recreation and leisure skills. Students with visual impairments need to be taught recreation and leisure activities that they can enjoy as children and throughout their lives. They are often not aware of the options or the possible adaptations that would allow them to participate in these activities. Such skills include both individual and organized group activities for students at all ages and levels. See www.vrcbvi.org.
- Career education. Students with visual impairments need to be taught about the variety of types of work and career options that are available since they cannot casually observe people in different job roles. They need opportunities to explore their strengths and interests in a systematic, well-planned manner. Career exploration and subsequent training may include the acquisition of specialized skills and equipment and an understanding of how to request and develop natural supports in the workplace to compete in the job market. Students must be prepared for a wide range of vocational choices and the adaptations, including technological devices, which make them attainable. It is important to have opportunities to job shadow for concrete experiences of different career choices and to learn about other persons with visual impairments who have successful vocational outcomes. For information on the DBVI vocational rehabilitation program, see http://www.vdbvi.org/VocRehabServices.htm.
- Self-determination. Self-determination includes personal decision-making, self-advocacy, and assertiveness based on an understanding of one's abilities and related needs.
 These skills lead to competence, as opposed to learned helplessness, and are important

components of positive self-esteem. Specialized instruction in developing self-determination skills can help students participate meaningfully in their educational and transition planning and make positive adult lifestyle, job, and other life choices upon graduation. See **www. imdetermined.org** for information on the VDOE's self-determination project.

Ongoing assessment of each of the ECC areas is critical to measuring success and assuring independence. Instructional needs in the ECC areas can be addressed using a variety of service delivery models. Collaboration between professionals will ensure comprehensive services. Although the TBVI and the O&M specialist are the primary resources for instruction in the ECC, family members, occupational therapists, physical therapists, speech-language pathologists, classroom teachers, other division personnel, and DBVI staff members can also play important roles in providing the needed instruction.

Instructional time. It is difficult to find time within the typical school program for addressing all needed elements of the core curriculum and ECC. Flexibility within the school schedule may be required. The ECC may need to be addressed in many ways, including:

- incorporation of ECC goals within the core content areas. See Appendix E;
- extension of preschool (for children ages 2 5);
- additional years in school and entitlement through age 21;
- after-school enrichment programs sponsored either by school division or community agencies;
- summer enrichment programs, either locally, or offered by the Virginia School for the Deaf and the Blind at Staunton (www.vsdbs.org) and Virginia Rehabilitation Center for the Blind and Vision Impaired (www.vrcbvi.org);
- programs offered by DBVI (www.vdbvi.org); or
- for young children, intervention in the child's home or natural environment through Part C services (www.infantva.org) or Part B preschool.

Instructional accommodations/modifications. In addition to the specific areas of the ECC, students with visual impairments may need accommodations to access the same assignments as their peers. These accommodations may include extended time, specialized instruction, specialized materials, and environmental adaptations to reach the same levels of performance as sighted students. Individualized instruction for certain skills that may be difficult to learn in a large group setting may be needed for concepts such as map skills, advanced mathematical concepts, and spatial concepts. Specialized equipment and materials may also be needed, such as a braillewriter, dark and/or raised line paper, a long cane, an abacus, specialized software for computers, low vision aids, and electronic equipment for auditory access to print material. For most students, accommodations should be designed so that success in the general curriculum can be attained without lowering expectations. Some students may also need modifications to the general curriculum to develop an appropriate individual program.

Accessible instructional materials. For many students with print disabilities, the limitations of print materials create barriers to access and therefore to learning. In 2004, Congress passed amendments to IDEA requiring printed textbooks, printed core materials, and other educational materials to be converted to alternate formats (Braille, large print, electronic text, and audio recordings) to meet the unique learning needs of students with print disabilities. The Accessible Instructional Materials Center of Virginia (AIM-VA) assists the VDOE in implementing the National Instructional Materials Accessibility Standards (NIMAS) regulations under IDEA 2004.

The AIM-VA, part of the Helen A. Kellar Institute for Human Disabilities at George Mason University, produces and delivers accessible instructional materials for school divisions in Virginia who have students with an IEP indicating a need for alternate formats of printed materials. The AIM-VA also provides training and technical assistance to school divisions who order and use these accessible instructional materials. See **www.aimva.org**.

Cultural and linguistic diversity. Increasing numbers of students in Virginia represent diverse cultural, ethnic, and religious groups, including students who are blind or visually impaired. Individual cultural groups may not share in the beliefs and practices of the majority population; therefore, educational personnel must be sensitive to cultural responses to disability and work with families to understand how their beliefs may differ with that of the school. For example, it may be necessary to alter the methods used in sighted guide techniques to conform to cultural expectations about appropriate touch.

VII.

Role of the Teacher of Students Who Are Blind Or Visually Impaired

TBVI are team members for all students with visual impairments, including those with deaf-blindness. The educational needs of these students vary widely. From initial evaluation to instruction to assessment, the TBVI plays a critical role in helping students, teachers, paraprofessionals, family members, and related service personnel.

TBVI have many roles, including:

Assessment and evaluation

- assisting other professionals in developing appropriate evaluation and assessment strategies;
- conducting the FVA and the LMA;
- conducting or participating in assistive technology evaluations;
- referring students, as appropriate, for O&M evaluations;
- referring students for low vision exams conducted by low vision practitioners;
- interpreting evaluation and assessment results regarding the impact of a visual impairment; and
- evaluating student progress and providing progress notes.



Direct instruction in the ECC

- providing direct instruction in visual efficiency, tactile symbols, Braille, assistive technology, auditory skills, social skills, use of near and low vision devices, and other areas of the ECC, as appropriate;
- supporting families of young students as they help their children reach developmental milestones with adapted strategies specific to needs related to the visual impairment; and
- providing support to the student to facilitate development of self-esteem, selfdetermination, and social acceptance.

Supporting educational teams

The TBVI should be able to educate, support, and collaborate with family members and other members of the instructional team who work with the student. The TBVI must be able to convey professional opinions in a diplomatic, collaborative manner in order to ensure that appropriate programming is recommended for the student with a visual impairment. The TBVI's supporting roles may include:

- supporting families in developing early childhood goals and objectives related to the visual impairment;
- supporting transitions from Part C services to preschool, preschool to elementary school, elementary to middle school, and middle school to high school;
- ensuring that necessary skills are attained for transitioning from school to adult life;
- providing direct instruction, co-teaching, and participating in other collaborative efforts;
- consulting with parents, teachers, and other professionals in the home, community, and school on providing instruction in the ECC areas;
- modifying the environment to accommodate specific visual needs;
- modeling appropriate instructional techniques;
- providing, creating, and acquiring adapted materials;
- maintaining current eye reports on each student and interpreting ophthalmological information to the educational team;
- providing in-service training and consultation to the educational team in school and to professionals in applicable community settings (e.g., community-based instruction and community-based employment);
- recommending adapted strategies for access to the general curriculum and participation in the school community;
- ensuring that a vision-specific support system is in place for transitioning from school to adult life;
- building independence and success in home, community, and school environments; and
- participating as a member of the child's IEP team. Unless the regulatory requirements are met regarding excusal, as described 34 CFR § 300.321(a)(5) and 8 VAC 20-81-110 C.1.e, the TBVI must attend each IEP meeting if he or she:

- is the child's special education teacher, as described in 34 CFR, §300.321(e) (1) and 8 VAC 20-81-110 D.1, regarding IEP team composition; or
- is the individual who must interpret the instructional implications of evaluation results, as described in 34 CFR § 300.321(a)(5) and 8 VAC 20-81-110 C.1.e

Administrative/recordkeeping duties

- referring each eligible student to the DBVI after securing a signed parental release to share information;
- maintaining records on all evaluations, IEPs, and progress reports;
- ensuring that each student has updated FVA, low vision assessment, and O&M evaluation, as appropriate;
- attending IEP meetings;
- if the TBVI has been designated by the division superintendent as the digital rights manager for students who are blind or visually impaired, ordering, receiving, distributing, and returning adapted textbooks as appropriate for each student (see www.aimva.org);
- completing and submitting end-of-year reports annually to DBVI;
- maintaining inventory on materials on loan from DBVI's Learning Resource Center; and
- providing DBVI with copies of recent eye examination reports or any change in contact information for students open to DBVI.

The No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008) (NCLB), mandates the provision of highly qualified professionals. In cases where the TBVI is not the student's highly qualified instructor in academic content areas, the TBVI may collaborate with the academic teacher of record.

For information about certification requirements in Virginia, see http://www.doe.virginia.gov/VDOE/Compliance/TeacherED/nulicvr.pdf; for Virginia's program for training TBVI, see http://kihd.gmu.edu/teacher_prep_program; and for recruitment strategies, see Appendix B.

VIII.

Role of Virginia Department for the Blind and Vision Impaired Education Coordinators

Education coordinators of DBVI perform many roles, including:

- facilitating and completing the intake of a student/client referral;
- supporting families of infants and toddlers who are blind or visually impaired and providing consultation and resources to Part C (early intervention) providers;
- serving as a liaison between DBVI and school divisions;

- participating in eligibility and IEP meetings when asked;
- providing professional development opportunities for TBVI;
- working with administrators of special education to develop programs for students who are blind or visually impaired;
- mentoring new TBVI and providing technical assistance to all teachers; and
- supporting families of students who are blind or visually impaired.

"Because the need for safe movement throughout their school, home, and community environments is of critical importance for blind and visually impaired students, and because inadequate skill in this area could have an adverse impact on the ability of some blind and visually impaired persons to obtain appropriate employment, orientation and mobility services should be considered for each blind and visually impaired child."

Office of Special Education and Rehabilitative Services (OSERS), 2000, p. 36590.

IX.Role of the Orientation and Mobility Specialist

Movement, independent or supported, is critical for learning. O&M is recognized in IDEA 2004 as a related service, which may be required to assist a child with a visual impairment to benefit from special education. O&M specialists provide services that enable students who are visually impaired to attain systematic orientation to and safe movement in school, home, and community environments. They are critical members of the team for students with visual impairments who have identified O&M needs. The IEP team may consider an O&M assessment for every initial evaluation and triennial evaluation for a student who is identified as legally blind.

It is important that O&M specialists have the competencies necessary to provide effective services to students. There are currently two organizations that certify O&M specialists: the Academy for Certification of Vision Rehabilitation and Education Professionals (http://www.acvrep.org/index.php?categoryid=1&p2_articleid=7) and the National Blindness Professional Certification Board (http://www.nbpcb.org). In Virginia, there is no licensure for O&M specialists.

O&M specialists have many roles. These may include:

Assessment and evaluation

- assisting in conducting the FVA when appropriate;
- conducting the O&M assessment; and
- evaluating student progress and providing progress notes as per division policy.



Direct instruction in the ECC

- encouraging purposeful movement, exploration of immediate surroundings, and motor development for young children with visual impairments;
- teaching spatial and environmental concepts and use of information received by the senses (such as sound, temperature and vibrations) to establish, maintain, or regain orientation and line of travel (e.g., using traffic sounds at an intersection to cross the street);
- providing support to the student to facilitate development of self-esteem, self-determination, and social acceptance;
- orienting students to unfamiliar environments;
- instructing in efficient use of low vision for movement;
- teaching efficient use of low vision devices;
- teaching use of mobility tools, including the long cane and adaptive mobility devices, for safely negotiating the environment; and
- providing travel experiences in the community, including residential and business environments and public transportation systems.

Supporting educational teams

- supporting families of young children in encouraging gross and fine motor skills, sensory skills, basic concepts, and other developmental milestones;
- ensuring continuity from early childhood intervention services to school-age programs;
- ensuring that appropriate vision-specific supports are in place and the necessary skills are attained for transitioning from school to adult life;
- modifying the environment to accommodate specific mobility needs;
- modeling appropriate O&M techniques for other team members;
- providing, creating, and acquiring adapted materials, such as tactile maps and mobility devices;
- providing in-service training and consultation to other team members in home, school, and community settings; and
- recommending O&M strategies for access to the general curriculum, such as physical education class and participation in school and community extra-curricular activities.

Administrative/recordkeeping duties

- maintaining records on all evaluations, IEPs, and progress reports; and
- attending IEP meetings.



Role of the Paraprofessional for Students with Visual Impairments or Deaf-Blindness

The decision to assign a paraprofessional to a student is made by the IEP team after careful consideration of what accommodations or modifications are necessary for the student to make progress toward IEP goals. Paraprofessionals need specific and ongoing training in order to effectively support the student's learning. Although NCLB requires minimum educational levels for paraprofessionals, additional specific training on the impact of visual loss is important for effective instructional support for a student who is blind or visually impaired. The roles of paraprofessionals vary with the specific student or classroom being supported. However, they must support the student with a visual impairment and/or deaf-blindness in accordance with specific direction from the TBVI and/or O&M specialist. Without proper orientation and supervision, paraprofessionals can inadvertently act as a barrier between the student and peer involvement and can detract from the student's progress toward independence. Over-reliance on a paraprofessional over time can result in students' exhibiting passivity and unnecessary dependence on adults.

Classroom paraprofessionals may be hired to provide overall support to the larger class with particular duties for a student with a visual impairment and/or deaf-blindness. Their role may include assistance for activities of daily living, health and safety, and/or access to the environment. Some programs employ paraprofessionals to provide assistance with material preparation, which may include but is not limited to copying, highlighting, enlarging, and scanning materials.

Paraprofessionals who work with students with deaf-blindness should receive training including information on deaf-blindness in general and also on the specific communication and learning strategies that are appropriate with individual students. Often students with deaf-blindness require assistance to connect with what is happening in the environment beyond what they can personally see or hear, often using highly individualized communication systems. For information on educational support offered by the Virginia Project for Children and Young Adults with Deaf-Blindness, see http://www.vcu.edu/partnership/deaf_blindness.html.

Paraprofessional job functions differ according to role, but in general, duties include:

- working under the direction of vision professionals and staff to modify instructional materials, including use of Braille translation or magnification software;
- storing and distributing large print, Braille, and audio books under teacher supervision;
- assisting teachers with instruction and activities;
- reinforcing O&M skills for movement of students between instructional locations or activities;
- increasing access for students with deaf-blindness to their immediate environment and implementing a meaningful communication system; and
- assisting students in becoming increasingly independent.



XI.

Role of the Family in the Individualized Education Program Process for Students with Visual Impairments

Quality education is fostered by collaboration between educators and families. One goal of Part C early intervention services is to support parents and caregivers in developing competence and confidence to help their child learn and develop. Family members may continue to need suggestions and support as their child enters school in order to adapt the environment so that their child has access to information that other children gain through vision.

Coordination of all team members, including family members, helps to assure a shared focus on student success. Family members bring knowledge of their child but also needed information about the unique needs of and services for students with visual impairments in order to be informed participants on the team. Information about specific teaching strategies, materials, and activities will need to be shared with family members to ensure consistent approaches and to support and facilitate quality interactions between family members and the child.

Families of students with visual impairments have the same rights and responsibilities as families of all students with any disabilities. For example, state and federal special education regulations require school divisions to afford the parents of a child with a disability an opportunity to participate in meetings with respect to the identification, evaluation, and educational placement of the child. 34 C.F.R. §§ 300.501(b) and (c); 8 VAC 20-81-170 A.

"There is a saying among educators of students with visual impairments ..., 'There is no best placement for a child with a visual impairment. There is a best placement for each individual child at a particular time in her/his life.' Therefore, we cannot adequately meet the needs of students who are blind or visually impaired unless we have a full continuum of placement options."

NASDSE, 1999, p. 26.

XII.

Appropriate Educational Placements for Students with Visual Impairments

Children under the age of two or three are served through Part C early intervention services in the setting deemed most appropriate to each family situation. The most appropriate setting is determined as the placement supporting the family in achieving desired outcomes for their child with as little disruption as possible to daily routines and family life. Children who have their second birthday before September 30 may be served in the schools through Part B.

For preschool and school-age students, IDEA 2004 and its federal and state implementing regulations guide placement. Part B regulations require public agencies to make available a continuum of alternative placements, or a range of placement options, to meet the needs of students with disabilities for special education and related services. The options on this continuum, which may include regular classes, special classes, separate schools, and instruction in hospitals and institutions, must be made available to the extent necessary to implement the IEP of each student with a disability. 34 CFR §§300.115 and 300.116; 8 VAC 20-81-130 B and C.

The IEP team should determine an appropriate learning environment based upon each student's individual educational needs. By law, the team must consider the least restrictive environment (LRE) for each student. LRE is typically interpreted to be the placement as close to the child's home as possible in a setting with nondisabled peers and with an appropriate program to meet assessed needs of the individual child. Consideration should include both the core and expanded core subjects for a student with a visual impairment. The law requires the IEP team to first look at placement in general education with supplementary services, program modifications, and supports from school personnel as needed.

After considering educational needs in both the expanded core and general curricula, the IEP team must carefully select from an array of potential settings. Collaborative settings, itinerant teacher services, resource rooms, self-contained classrooms, and placement at such schools as Virginia School for the Deaf and the Blind at Staunton (*www.vsdbs.virginia.gov*) are all options to be considered by the IEP team. Students' needs drive placement decisions. Any service delivery option may be appropriate for an individual student at any given time, and the appropriate placement option may change over time for a particular student. 34 CFR §300.116; 8 VAC 20-81-130 C; 8 VAC 20-81-140.

"For a child to become proficient in Braille, systematic and regular instruction from knowledgeable and appropriately trained personnel is essential. For blind and visually impaired children, including those with other disabilities, IEP teams must ensure that the instructional time allocated for Braille instruction is adequate to provide the level of instruction determined appropriate for the child."

OSERS, 2000, p. 36589.

XIII.

Determining Service Time for the Teacher of Students Who Are Blind or Visually Impaired and/or for the Orientation and Mobility Specialist

The IEP team must determine the appropriate amount of services that a student will receive from a TBVI and/or an O&M specialist based on the student's assessed needs in both the general and expanded core curricula. These needs must be determined based on appropriate evaluation and/or assessment data. Time for services from the TBVI and O&M specialist may not be determined based upon availability of personnel. School divisions should establish procedures for documenting student need and the vision professional's time. Therefore, in order to ensure adequate current and future numbers of qualified vision professionals, a division's program should include active recruitment for new TBVI and O&M specialists in conjunction with VDOE, DBVI, and the personnel preparation program in the state. See Appendix B for information on the VI Consortium and recruitment strategies.

The IEP team should consider the following when determining service delivery time:

- Students require intensive daily instruction from a TBVI when beginning to learn to read and write Braille.
- The TBVI may need additional time for preparation of materials and collaboration with the team.
- Students may need additional instruction when learning to utilize assistive technology that will allow them to function more independently later.

- Social skills instruction must be frequent enough to ensure mastery and generalization. Instruction may need to be provided directly to the student with guided practice and observation across a variety of settings. Vision professionals also have important roles in training other staff and sometimes family members to reinforce newly learned social skills.
- To provide adequate time for community instruction, the O&M specialist may need to schedule lessons in blocks longer than a normal class period. Time may need to be built into a schedule to permit travel to appropriate settings as well as enough time to explore and learn decision-making skills for safety in unfamiliar situations.
- Students with low vision who are learning to use optical devices may initially require intensive direct instruction, followed by reduced time as mastery increases. Some visual conditions require flexible scheduling to support learning in varied environments. For information on the DBVI low vision program, see http://www.vdbvi.org/LowVisionServices.htm.
- Students with multiple disabilities need routines that create predictable patterns for learning. To support instruction in newly introduced skills using a transdisciplinary model, the TBVI may initially schedule more intensive daily consultation for a specified period of time for:
 - observing the student's current skill levels;
 - working directly with the student to determine appropriate modifications to materials or instructional methodology;
 - modeling teaching to show other team members appropriate techniques; and
 - monitoring student progress.
- There should be scheduled time for active collaboration and consultation with the educational team, including family members, for each student. When the consultative model includes participating in team evaluations, contributing to the writing of IEPs, working periodically with the student, observing across activities, modeling appropriate teaching strategies, creating and preparing communication materials, and attending staffings on a complex student, considerable time may be required from the TBVI and/or O&M specialist.
- Some students may require minimal assistance beyond adapted materials and communication with the general education team and family. Assuming the student's progress in the ECC is assessed by the TBVI annually, such a student may only require consultative services.

The IEP team will make the decision as to whether direct or indirect (consultative) service is needed based on the assessed needs of the student. Direct service is appropriate for a student who has needs that only a particular professional can meet due to his or her unique qualifications, training, and/or experience. For example, the O&M specialist is the professional who should introduce instruction in the use of a long cane or teach the use of low vision devices for street crossings. The TBVI is the professional who teaches new Braille skills or evaluates visual functioning in classroom environments. In addition to direct services, the vision professional must schedule time with the other team members and the family to ensure consistency in programming across the day.

Consultation is a model that can be used effectively to support a variety of educational purposes. Consultation services can be used to ensure that a student has multiple opportunities in a day to use a particular skill and that modifications and needed supports are implemented throughout all

instructional settings. This model is critical for students who have difficulty generalizing to new locations or situations. Communicating about student programming and progress with all parties involved in a student's educational program can be extremely time-intensive. Depending on the student's needs and the instructional setting, the amount of time needed for consultation can vary. Observation times across the school day and possibly at home should be scheduled to provide documentation of student progress and necessary programming adjustments. Collaboration should occur between the family, TBVI, O&M specialist, classroom teacher, and other personnel to assure that the student's needs are appropriately addressed. For example:

- The TBVI may demonstrate instructional strategies to the classroom teacher that will enable
 a student to efficiently view a lesson or incorporate strategies important for sensory skill
 development in other developmental areas.
- For another student, the vision professional may work with school personnel so that tactual cues are provided in the hallways and classrooms to facilitate use of independent mobility skills.

The time needed by a vision professional to work with an individual student can be expected to change over the student's years in education. Some students will perform independently and competently in school until changes occur in social demands, academic requirements, or educational environments. For example, a student who has been receiving consultation only in elementary school may need direct instructional support as appropriate to match current needs upon entering middle school. Once skills are acquired, service time may be reduced by the IEP team.

Many IEP goals and objectives, if required, can be proposed and addressed collaboratively by the primary service provider, typically the classroom teacher, with support from the vision professional. The student's IEP team, including the parent, must provide a statement of how the child's progress toward the annual goals will be measured and when periodic reports on the progress will be provided. 8 VAC 20-81-110 G.8. The school division should establish procedures for documenting student progress and the vision professional's time.

XIV.Determining Staffing for Vision Professionals

It is important that staffing allow for necessary instruction and services to meet the unique educational needs of students with visual impairments. Administrators should evaluate adequacy of staffing levels annually or more often as needed. Although finding qualified personnel in this field is a challenge across the country, it is necessary to establish caseloads to assure that IEPs are implemented and students' needs are met.

The Virginia Regulations do not currently establish caseloads for TBVI. But the Virginia Regulations state, "Special education services for children with visual impairment are established, maintained, and operated jointly by the local school board and the Virginia Department for the Blind and Vision Impaired." 8 VAC 20-81-40 A.3.a. School divisions should follow general standards for the caseloads of resource teachers of students with other disabilities.

A teacher's caseload should be based on the time needed for students to achieve their IEP goals, including time for direct service, collaboration/consultation, lesson and material preparation, and evaluation. Participation in evaluation, observation in multiple settings and across multiple activities,

modeling strategies, and attending team meetings are examples of the work load that should be factored into the service provider's time.

As a part of monitoring staffing levels of programs, TBVI caseloads need to be regularly reviewed to assure equity among teachers and adequate staffing to meet student needs.



X. Conclusion

Students with visual impairments, including those with multiple disabilities and/or deaf-blindness, are a heterogeneous population. The small number of students may make it difficult for any one school or program to have full knowledge and adequate resources to meet varied and intensive needs of this unique student population. This document was designed to provide guidance and resources for key components to be considered when planning for appropriate individual educational programs for students with visual impairments including blindness. Further information and support is available from the regional education coordinators from the DBVI, Virginia School for the Deaf and the Blind at Staunton, and the VDOE.

APPENDIX A Unique Needs of Students Who Are Blind or Visually Impaired

(from *Program Guidelines for Visually Impaired Individuals* and used with permission from the California Department of Education)

The unique needs of students who are blind or visually impaired, set out below, can be used as a general framework for assessing each student and for planning and providing instruction and services to meet the assessed individual needs.

Concept Development and Academic Needs

A visual impairment will often impede a student's development of visual concepts and learning of academic subjects. Special concept development and academic needs that may need to be addressed include:

- Developing a good sense of body image;
- Understanding the following concepts: laterality, time, position, direction, size, shape, association, discrimination, sequence, quantity, sensations, emotions, actions, colors (to the best visual ability), matching, and classifying;
- Developing listening skills appropriate to the level of the student's functioning, including the development of auditory reception, discrimination, memory, sequencing, closure, and association skills;
- Developing auditory comprehension and analysis skills appropriate to the level of the student's functioning, such as the development of the ability to understand character; understand setting; recognize feelings; recognize climax, foreshadowing, and purpose; and distinguishing fact from opinion;
- Becoming familiar with the format of, and knowing how to use, reference materials in the student's primary reading medium or media;
- Being able to interpret accurately maps, charts, graphs, models, and tables;
- Developing skills for note taking during a lesson;
- Developing writing and recording skills for note taking from material originally intended for print, e.g., use of material that has been recorded or is read aloud;
- Developing the ability to organize notes and other study materials;
- Developing the ability to organize one's time;
- Developing the ability to select and use a reader; and
- Being able to acquire materials in various learning media, e.g., Braille, large type, aural media, or electronic format.

Literacy and Communication Needs

A student with a visual impairment will usually require alternative modes for instruction in reading and writing. He or she will need special skills in using alternative strategies, learning media, and specialized equipment and materials to communicate effectively (link with "Determining the Appropriate Reading Medium").

Communication needs that should be addressed where appropriate include:

- Being skilled in reading, using appropriate modes (e.g., Braille, print, or recorded format) for such purposes as gaining academic information and pursuing personal, career, and recreational interests;
- Developing skill in writing for personal needs, using appropriate modes (e.g., Braille, print, typewriting, handwriting, word processing) for such purposes as note taking, recording phone numbers and addresses, taking messages, and writing travel directions and personal notes;

- Being proficient in typing and computer keyboarding skills;
 Being able to write one's own signature legibly;
 Being able to operate basic communication equipment, such as radios, talking book machines, recorders, and CD players;
- Being skilled in using a recording device for recording lectures or for recording phone numbers and addresses;
- Being cognizant of, and able to use, appropriate special devices for reading and writing, such as slates and styli; optical aids; closed-circuit television systems; electronic note-taking devices; computers adapted with speech, enlarged type, or Braille; and other voice, video, and data information technology; and
- Being cognizant of, and able to use, appropriate special devices for mathematics and science, e.g., the abacus; talking calculators; electronic Braille note-taking devices; specialized measuring equipment; and computers adapted with speech, enlarged type, or Braille.

Social Emotional Needs

A visual impairment often affects a student's self-concept, observation of behavior in social situations, involvement in recreational activities, and sexuality. The student with a visual impairment may, therefore, have special needs for socialization, affective education, recreation, and sex education. These students will also need to learn to deal with the psychological implications of the visual impairment.

Socialization

Socialization needs that should be addressed include:

- Understanding and displaying acceptable social behavior appropriate to a variety of group situations;
- Being able to discriminate between those behaviors that are socially unacceptable in public yet acceptable in private;
- Understanding and exhibiting appropriate assertiveness techniques in a variety of situations;
- Students with visual impairments need to understand the difference between allowing others to help when it is not needed and deciding to ask for help when it is needed;
- Being aware of and using appropriate nonverbal communication techniques, e.g., gestures, eye contact, raised head, and facial expressions;
- Being aware of and being able to control body posture, movement, and physical mannerisms in an acceptable, coordinated manner;
- Being aware of and using proper manners in eating and other social situations;
- Being able to make introductions properly and demonstrate appropriate conversational skills;
- Being prepared to contribute constructively to group activities and social situations;
- Being aware of appropriate social distances for various communication situations; and
- Being aware of dress codes for specific groups and occasions and dressing appropriately for one's age and situation.

Affective Education

Affective education needs that should be addressed include:

- Recognizing that each person is unique and different from every other person;
- Understanding that persons who are visually impaired have the same emotions as everyone else:
- Being able to identify one's feelings;
- Being able to express one's feelings to others directly and in a socially acceptable manner;
- Having feelings of self-worth and well-being;

 Recognizing one's own strengths and weaknesses in a realistic manner; Acknowledging both positive and negative feelings in oneself and in others and understanding that both types of feelings are legitimate; Being able to identify and appropriately express one's likes and dislikes; Being able to understand and recognize teasing and developing appropriate ways of handling it; Being aware of alternative ways to respond to the feelings and behavior of others; Feeling that one is a valuable, contributing member of society; Being able to identify and understand a wide range of feelings in oneself and in others, e.g., happiness, guilt, frustration, boredom, confusion, anger, embarrassment, and pride; Being aware that the way a person feels about himself or herself is reflected in the way he or she treats others; Being aware that each person must establish his or her own set of values and live by them; Being aware of the concept of peer pressure and determining the appropriateness of conforming to peer pressure; Being able to identify and share feelings about his or her visual impairment in relation to being accepted by one's peers; Understanding the ways in which a person can become victimized by allowing others to make choices in his or her life; • Understanding the long-range results of too much dependence on others; Being aware of the connection between being in control of one's life and taking responsibility for what happens in life; Being able to feel comfortable asking for help from others when it is appropriate;

Recreation

Recreational needs that should be addressed include:

Being an effective self-advocate.

Being familiar with a variety of social and recreational activities;

deciding to ask for help when it is needed; and

 Being able to participate in a variety of different recreational activities with a group and on an individual basis;

Understanding the difference between allowing others to help when it is not needed and

- Realizing that many options are involved in deciding how to spend one's leisure time;
- → Learning to play indoor and outdoor games appropriately, e.g., ball, cards, and roller skating:
- Developing hobbies of individual interests, e.g., arts, crafts, music, or collections;
- Being competent in several different recreational activities;
- Learning about popular spectator activities in order to enjoy attending them and to be able to discuss these topics appropriately;
- Being aware of opportunities for participation in recreational activities in the neighborhood and in the community in addition to those designed specifically for persons who are visually impaired, e.g., YMCA or YWCA, neighborhood parks and centers, scouting, and school and social clubs; and
- Being aware of current recreational trends and being able to participate where appropriate,
 e.g., learning current dance steps or fad games.

Family Life Education

Family Life Education needs that should be addressed may include:

- Being able to identify with his or her own gender;
- Being knowledgeable about appropriate grooming and personal hygiene techniques;
- Being able verbally and tactually, with the use of models, to identify human male and female body parts and organs of the reproductive system, using correct terminology;

- Being knowledgeable about appropriate child care procedures and adaptations that may be necessary for a parent who is visually impaired through contact with real infants and children;
- Being aware of verbal and nonverbal communications that relay sexual messages to others, e.g., the use of body language;
- Being knowledgeable about strategies for prevention of physical and sexual abuse, including inappropriate touching and rape;
- Being knowledgeable about the genetic factors related to some visual impairments that one should consider before having children and being aware of genetic counseling;
- Being aware of the responsibilities associated with premarital sexual relations, marriage, and parenthood; and
- Being able to express and discuss any concerns related to one's visual impairment and relations with the opposite sex, e.g., dependency, not being able to drive, financial concerns, and genetic factors.

Psychological Implications

How well a student understands and accepts his or her visual impairment may be determined by addressing the needs in this area, including:

- Being able to recognize that one has a visual impairment;
- Being knowledgeable about one's own eye condition;
- Being able to explain one's eye condition and vision-related needs to others;
- Understanding the vision process;
- Understanding and accepting any physical limitations caused by the visual impairment;
- Understanding how low vision aids can assist in improving visual abilities and accepting the use of appropriate low vision aids;
- Accepting the use of alternative techniques and apparatuses for obtaining sensory information, where appropriate, e.g., use of Braille, the long cane, adaptive technology, and low vision aides;
- Being knowledgeable about personal eye care, e.g., medications, hygiene, regular eye exams, and low vision assessments; and
- Having realistic knowledge of current treatment as it relates to one's visual impairment.

Sensory/Motor Needs

A visual impairment may affect one's gross and fine motor skills; alternative sensory discrimination and sensory integration skills; and abilities to develop appropriate posture, balance, strength, and movement. The student with a visual impairment may need to develop special skills in these areas. Sensory/motor needs that should be addressed include:

- Learning to control the head, limbs, and body for purposeful exploration and movement;
- Learning to sit, crawl, stand, and walk independently;
- The student with a visual impairment will need special skills to understand and become oriented to various environments;
- Learning to control the head and body while sitting, crawling, standing, and walking (while walking, the student should exhibit appropriate gait, stride, and posture);
- Developing the ability to balance while standing still and while in motion;
- Using gross motor skills, such as crawling, walking, exploring for objects, negotiating stairs, negotiating depth changes, opening and closing doors, and pushing and pulling objects;
- Developing fine motor skills, such as grasping and releasing objects of varying sizes and shapes, turning door handles, grasping a cane, and dialing a phone;
- Developing sufficient muscle relaxation and flexibility to perform basic daily living and mobility skills safely, efficiently, and gracefully;
- Developing sufficient strength, stamina, and endurance to complete routine mobility, physical fitness, and daily living skills tasks;

- Learning to identify, discriminate, and use various textures and objects tactually and underfoot;
- Learning to identify, discriminate, track, and use continuous and intermittent auditory sources indoors and outdoors;
- Learning to identify, discriminate, and use various kinesthetic and proprioceptive sources indoors and outdoors, such as changes in temperature, movement of air currents, or height of slopes and depth changes; and
- Learning to identify, discriminate, and use various olfactory sources indoors and outdoors.

Orientation and Mobility Needs

A visual impairment usually affects how the student learns about and functions within various environments. The student with a visual impairment, therefore, will need special skills to understand and become oriented to these environments and to move, travel, and play independently and safely within them.

Orientation and mobility needs that should be addressed include the following:

- Developing a conceptual understanding of body image, e.g., planes, parts, laterality, and directionality in relation to objects and environmental features;
- Concrete environmental concepts, e.g., grass, lawn, cement, wood, carpet, tile, tree, bush, and street;
- Spatial concepts, e.g., far, near, close, high, low, above, below, facing, in front of, behind, beside, away from, next to, forward, backward, sideways, and 90-, 180-, and 360-degree turns:
- Ocompass direction concepts, e.g., north, south, east, and west relationships, sides of streets, names of corners, and relationships among changes in direction;
- Traffic and traffic control concepts, e.g., fast, slow, parallel, perpendicular, same direction, opposite direction, near side, and far side, stop signs, walk signs, and light-controlled intersections;
- Learning to travel independently at home and at various school settings throughout one's school career;
- Learning appropriate trailing and protective techniques and techniques for locating objects to facilitate independent orientation and mobility at home and school;
- → Learning to use appropriate sighted guide skills in all travel situations when needed, such as traveling in normal situations; going through narrow passages; ascending and descending stairways; using escalators and elevators; switching sides; seating oneself in chairs, in sofas, and at tables; and establishing and maintaining control of the sighted guide situation with familiar and unfamiliar guides;
- Learning to use remaining vision and distance low vision aids, as appropriate, to the maximum extent possible for independent, safe orientation and mobility;
- Learning to use the long cane appropriately to supplement or replace visual travel skills (skills to be acquired are basic grasp and hand and arm position; touch technique; use of the cane at closed doorways and stairs and in congested areas and in social situations; trailing techniques; and modified touch technique for location of drop-offs, e.g., curbs or down staircases).
- Developing an understanding of the importance, dangers, responsibilities, and behavior appropriate for independent travel in increasingly sophisticated settings;
- Learning to become oriented and travel independently in residential and rural areas, e.g., traveling along a residential sidewalk; traveling past driveways and walkways; locating curbs and wheelchair ramps; recovering from veering; crossing residential streets; recognizing and recovering from a change in direction on street crossings; using environmental tactile, auditory, kinesthetic, or olfactory cues, compass directions, maps, and spatial relationships for orientation and safe mobility in familiar rural or residential areas; and becoming independently oriented to an unfamiliar area;

- Developing an understanding of the services various business establishments provide, e.g., grocery stores, department stores, banks, post offices, and shopping malls;
- Learning the skills necessary to become oriented and to travel independently in light and major metropolitan business areas;
- Using traffic sounds to establish, maintain, or regain orientation and line of travel;
- Traveling safely and appropriately on increasingly busy business area sidewalks;
- Crossing independently intersections of four lanes or more controlled by traffic lights;
- Exhibiting appropriate verbal and physical public behaviors;
- Developing the ability to seek out and interact appropriately with the public for assistance in orientation or mobility as needed;
- Learning to use street address systems as an aid to orientation;
- Carrying identification and emergency funds when traveling;
- Knowing whom to contact in case of emergency or disorientation;
- Learning to locate independently various destinations in business areas;
- Learning to travel safely in various retail and service establishments, including independent travel on escalators and elevators;
- Learning to carry out increasingly complex personal business transactions independently;
- Understanding and being able to use public transit systems;
- Learning to acquire information regarding products, services, or location of various stores and businesses by using the telephone, including recording this information for later referral;
- Being able to recognize and safely travel past areas of road construction;
- Being able to negotiate railroad track crossings independently;
- Being able to travel independently within light or major metropolitan business areas;
- Being able to travel independently within light or major metropolitan business areas at a level sufficient to carry out tasks necessary for basic survival;
- Developing, if nonverbal, a feasible communication system for acquiring information and communicating needs;
- Learning to use adaptive mobility skills as necessary for use with ambulatory aids, such as wheelchairs, walkers, braces, and orthopedic canes, to provide for maximum independent mobility, e.g., bus lifts or rail ramps;
- Use of alternative mobility devices when appropriate; and
- Being able to develop and travel alternative routes and, if necessary, travel specific routes in limited areas to care for basic needs;

Daily Living Skills Needs

Because a visual impairment affects the student's ability to live independently, the student with a visual impairment will often need special techniques to function as independently as possible. Assessment and instruction to provide needed daily living skills should include those needs as follows:

Performing personal hygiene skills:

- Performing basic personal hygiene tasks, e.g., toileting, care of teeth and hair, and bathing needs; and
- Using personal service businesses to care for one's own needs and to make appointments, e.g., for barber or beauty shop services.

Performing dressing skills:

- Dressing and undressing, including tying shoes and fastening buttons and zippers; and
- Selecting appropriate clothing and planning clothing purchases.

Caring for one's own clothing:

 Using techniques for clothing storage and identification of colors and patterns, sorting laundry, and using a washer and dryer; and Using services such as shoe repair, performing minor repairs on clothing, and hemming and ironing clothing.

Practicing housekeeping skills:

- Locating and using housekeeping areas in the home, such as the kitchen, dining area, and bedroom; and assisting in basic upkeep, such as putting out trash and setting the table;
- Performing many basic housekeeping tasks, such as vacuuming and scheduling regular maintenance; and
- Being able to make basic home repairs.

Preparing food:

- Identifying kitchen appliances and performing basic pouring, stirring, measuring, and spreading techniques; and
- Using kitchen equipment, such as a stove and oven; preparing and cooking menus; following recipes; and preparing complete meals.

Practicing eating skills:

- Locating food on the plate;
- Using utensils properly; being familiar with passing food, serving oneself at buffets, and using cafeterias; ordering food from restaurant menus; and understanding tipping; and
- Accessing restaurants, cafeterias, and buffets.

Managing money:

- Identifying coins and knowing coin equivalents; and
- → Handling money in public, planning a budget, using checking and savings accounts, using automatic teller machines (ATMs) and other electronic banking and money management systems, and having one's own system for money management.

Practicing social communication skills:

- Conducting basic social interactions, including communicating needs; and
- Conversing appropriately with familiar persons and strangers.

Practicing skills in using telecommunications:

- Identifying one's own telephone number and placing an emergency call;
- Using directory assistance, using various types of telephones for personal and business calls, arranging for one's own telephone service, and displaying good telephone etiquette;
- Understanding fax communications and E-mail.

Practicing written communication skills:

- Understanding that written communication is used to convey information and ideas; and
- Writing a signature and personal and business letters, using a system for recording information, and using basic office supplies correctly.

Understanding changes in time:

- Responding to a daily schedule;
- Knowing events that occur during the daytime compared to nighttime; and
- Knowing how to tell time and use clocks and watches, knowing automatic time (weeks or months), scheduling one's own time, and keeping appointments.

Being able to organize systematically:

 Organizing time, activities, and personal belongings at home, at school, and in the community.

Career/Vocational Needs

To be successfully employed, the student with a visual impairment will often need guidance to prepare for the world of work. Assessment and instruction in career awareness and vocational education, including adaptive skills, will often be needed for an individual to succeed in the workplace.

Some career/vocational needs that may be addressed include:

- Understanding oneself in terms of the characteristics and attributes that make up one's individuality and recognizing one's uniqueness as a person and building one's self-esteem;
- Knowing the difference between work and play and when each is appropriate;
- Understanding the importance of doing a job to the best of one's ability;
- Understanding work ethics, including getting to work on time;
- Understanding the necessity of responsibility and commitment in the workplace;
- Being able to fill out a job application or giving the necessary information to another person;
- Being familiar with the development and use of a resumé;
- Knowing that money is a medium of exchange and related to work and developing concepts of financial management:
- Knowing and using personal information skills, including a legal signature;
- Maximizing one's capabilities in developing skills in technology and in using adaptive devices, such as computers, note-taking devices, and calculators;
- Being familiar with jobs held by one's family members and the jobs available in the school and the community, particularly jobs held by visually impaired persons;
- Experiencing hands-on work experiences through chores, paid jobs on or off campus or after school (particularly in the private sector), or in simulated work environments;
- Being able to interact appropriately with supervisors, coworkers, and the public;
- Participating in skill training at a job-entry level in a variety of experiences to assist in determining realistic occupational choices;
- Determining postsecondary education needs: whether to attend college or technical school or go to work;
- Knowing how to make contact with the Department of Rehabilitation for referral, training, and/or placement;
- Being able to use and train readers;
- Knowing sources for having materials transcribed and for obtaining specialized books, materials, and equipment;
- Being able to organize time and materials to maximize learning;
- Obtaining and managing financial assets for postsecondary education;
- Being self-reliant in managing postsecondary education;
- Being able to serve as one's own advocate in obtaining necessary services, adaptations, and equipment needed for success on a job, during job training, or in college; and
- Knowing and using laws prohibiting discrimination based on disability, including "equal access" and "reasonable accommodation."

APPENDIX B

Recruitment Strategies for Teachers of Students Who Are Blind or Visually Impaired and Orientation and Mobility Specialists

The Association of Education and Rehabilitation of the Blind and Vision Impaired (AER) features a Job Exchange, a listing of advertisements posted by school divisions, agencies, and other organizations in need of professionally trained staff. There is a fee charged for this service. The Job Exchange board can be found at http://www.aerbvi.org/modules.php?name=Content&pa=showpage&pid=33. To post a position on the AER Job Exchange Web site, complete the form found at http://aerbvi.org/downloads/5/0/JOBADFORM.doc.

The American Foundation for the Blind (AFB), **www.afb.org**, is a central source of information and services for individuals who are blind or visually impaired across the United States. Included in its resources is a listing of those colleges and universities offering teacher preparation programs for TBVI and O&M Specialists in the United States and Canada.

To access this list, go to **www.afb.org**:

- click on the arrow to the right of "find helpful services";
- highlight "personnel preparation"; and
- click on "find" to the right of the box.

The listing will appear, beginning with Alabama. You may also click on each listing to go directly to the state's Web site.

The Virginia Consortium for Teacher Preparation in Vision Impairment (VI Consortium) is made up of five universities: George Mason University, James Madison University, Norfolk State University, Old Dominion University, and Radford University. Its primary goal is to prepare teachers to be highly skilled at working with students with visual impairments and blindness. See http://kihd.gmu.edu/teacher_prep_program/

APPENDIX C Additional Resources and Web Sites

The following Web sites provide additional information on educating students with visual impairments:

Academy for Certification of Vision Rehabilitation and Education Professionals (certification agency for O&M specialists): http://www.acvrep.org/

AIM-VA (for accessible core educational materials): www.aimva.org

American Foundation for the Blind: www.afb.org

American Printing House for the Blind: www.aph.org

Association for the Education and Rehabilitation of the Blind and Visually Impaired: www.aerbvi.org

Council for Exceptional Children: http://www.cec.sped.org

Early Intervention (Part C, IDEA) services: www.infantva.org

Family Connect: www.familyconnect.org *

Hadley School for the Blind: http://www.hadley-school.org (with section for parents*)

IDEA legislation: http://idea.ed.gov/

National Association for Parents of Children with Visual Impairments: www.napvi.org*

National Consortium on Deaf-Blindness (formerly Deaf-Blind Link): http://nationaldb.org/

National Federation of the Blind: http://www.nfb.org/

OSER Policy Guidance on Educating Blind and Visually Impaired Students:

http://www.ed.gov/legislation/FedRegister/other/2000-2/060800a.html

Recording for the Blind and Dyslexic: http://www.rfbd.org

Texas School for the Blind and Visually Impaired Instructional Resources: http://www.tsbvi.edu/Education/index.htm (including family guide at www.tsbvi.edu/Education/hey-whats-cooking.htm)*

Virginia Association for Parents of Children with Visual Impairments: http://www.vaapvi.org/*

Virginia Department for the Blind and Vision Impaired: www.vdbvi.virginia.gov

Virginia Department of Education: www.doe.virginia.gov

Virginia School for the Deaf and Blind at Staunton: www.vsdbs.virginia.gov

Virginia Project for Children and Young Adults with Deaf-Blindness: http://www.vcu.edu/partnership/deaf_blindness.html

Virginia Rehabilitation Center for Blind and Vision Impaired: http://www.vrcbvi.org/

VI Consortium (Virginia's preparation program for teachers of visually impaired):

http://kihd.gmu.edu/teacher_prep_program/

Wonderbaby: www.wonderbaby.org*

^{*} Indicates a Web site or sections of a Web site specially developed for parents of children with visual impairments.

APPENDIX D Reference Publications

Assistance to States for the Education of Children with Disabilities. (2006). 34 C.F.R. Part 300.

Blankenship, K. (2007). Iowa expanded core curriculum resource guide. Iowa Department of Education.

- Cameto, R. & Nagle, K. (2007). Facts from NLTS2: Orientation and mobility skills of secondary school students with visual impairments. (Report No. NCSER 2008-3007). Washington, DC: National Center for Special Education Research. http://www.ed.gov/news.html.
- Guidance on Evaluation and Eligibility for the Special Education Process (VDOE, 2009 Pugh, G. (1999).

 National Association of State Directors of Special Education: Blind and visually impaired students:

 Educational service guidelines. Watertown, MA: Hilton Perkins Foundation, Perkins School for the Blind.
- Hazekamp, J. & Huebner, K. M. (1989). Program planning and evaluation for blind and visually impaired students: National guidelines for educational excellence. New York: AFB Press.
- Huebner, K. M., Merk-Adam, B., Stryker, D., & Wolffe, K. (2004). The national agenda for the education of children and youths with visual impairments, including those with multiple disabilities (Rev. ed.). New York: AFB Press.
- Individuals with Disabilities Education Act. (2004). P.L. 108-446 (Dec. 3, 2004). 20 U. S. C. §§ 1400 et seq.
- Riley, R. (2000). Educating blind and visually impaired students: Policy guidance from OSERS. http://www.ed.gov/legislation/FedRegister/other/2000-2/060800a.html.

APPENDIX E

The nine areas of the Expanded Core Curriculum (ECC) can be incorporated while teaching content areas included in the Standards of Learning (SOL).

Elements from the ECC:	Examples of how elements from the ECC can be introduced while teaching SOL content:	Related SOL:
Compensatory skills needed to access the general curriculum including: Access to literacy through	Students will participate in reading circle using books that have both Braille and print, or listening to a story on a CD.	Computer/Technology K.2.2; Reading, K.5 c.; Oral Language 1.1 a.
Braille and print, handwriting skills, and auditory skills; Communication skills including alternative communication	Students will touch Braille labels paired with the objects.	Writing, K.12; Reading K.6 b.
systems; and Specialized instruction in concept development that	Students will use calendar systems to follow daily routines.	Mathematics (Measurement) 2.13 a. and b.
may be taught using adapted material and strategies.	Students will pair shapes or colors with specific fruits or vegetables.	Oral Language K.2.c.; Mathematics (Geometry) 2.16
Sensory Efficiency - the systematic instruction to learn efficient use of senses including	Students will sort items by shape or texture.	Science, K.1 a. and e.; K.2 b.
visual, tactual and auditory skills.	Students will count points on a polygon.	Mathematics (Geometry) 3.14
	Students will repeat a pattern using shapes and textures.	Mathematics K. 4; K.5;K.16
Orientation and Mobility (O&M): Safe and efficient travel throughout the environment is a critical	Using a reference point, students will point north, south, east, or west.	History/Social Science (Geography) 1.4 b.
component in the education of students with visual impairments.	Using landmarks and cues, students will travel from the classroom to locations travelled to on a weekly basis.	History/Social Science (Geography) 3.6
	Students will place items above, below, beside a fixed item as requested.	Reading (Oral Language) K.2c. K.2f.; Science (Matter) K.4e.
	Using a tactile map, students will touch named locations on the map.	History/Social Science (Geography) K.5 c.; 3.4 a., 3.5 e.

Elements from the ECC:	Examples of how elements from the ECC can be introduced while teaching SOL content:	Related SOL:
Assistive technology: Technology permits students with visual impairments to access the general curriculum,	Students will use an enlarged or raised graphic organizer to create a template for a 3-paragraph essay.	English (Writing) 5.8b.; 6.7a.
to increase literacy options and to enhance communication.	Students will use a switch to participate in a cooking activity.	Mathematics, (Measurement) 2.11c.
	Students will use screen-reading software to access information through the internet.	English (Writing) 4.7g.; Computer Technology K.2.6; 6-8.6
Social skills: A visual impairment can socially isolate a student, impede typical social interactions or limit social skill development.	Students will orient their body, facing the person speaking.	English (Oral Language) 1.3 b.; 3.1 a.
	Students will thank a presenter by writing a note or creating a special project.	English (Writing) 2.11; 3.10
	Students will participate in a group project with same-aged peers.	History/Social Science (Civics) K.8g.
Independent living skills: Home living, self-determination, vocational goals, community access skills, and appropriate	Students will use adaptive measuring equipment to complete science lab.	Science, 3.1d.; Mathematics,(Measurement) 2.11b. and c.
interpersonal/social skills are critical for successful transition from school to independent	Students will add Braille labels to their daily agendas, books, and binders.	English (Writing) K.12; Computer/Technology K.2.7
living and employment.	Students will use the telephone to contact the Department for the Blind and Vision Impaired.	Computer/Technology 3-5.8; English (Reading) 4.3 d.
Recreation and leisure skills: Students with visual	Students will use the internet to access electronic books.	Computer/Technology 3-5.5; 6-8.6
impairments need to be exposed to and taught recreation and leisure activities	Students will take turns in a story-telling game.	English (Oral Language) K.3 a.; 6.1. a., b., and c.
that they can enjoy as children and throughout their lives.	Students will kick a beeping ball towards a goal.	Science (Force, Motion, and Energy) 4.2, a., b., and d.

Elements from the ECC:	Examples of how elements from the ECC can be introduced while teaching SOL content:	Related SOL:
Career Education: Students with visual impairments need to be taught about the variety of types of work and career options that are available since they cannot casually observe people in different job roles.	Students will complete an interest inventory and investigate two career opportunities.	History/Social Science (Civics and Economics) 14.a.
Self-determination: Self-determination includes personal decision-making, self-advocacy, and assertiveness based on an	Students will identify at least three components of the Americans With Disabilities Act.	History/Social Science (Civics and Economics) 3 b.
understanding of one's abilities and related needs.	Students will participate in their own IEP meetings, identifying the accommodations necessary for their IEPs.	Oral Language 6.1. a. and b.
	Students will independently self-advocate for their specific needs in the classroom by relating difficulties to teachers.	History/Social Science (Civics and Economics) 1 f. and h.

Developed by: Kim Coleman, Shannon Sullivan, Peggy Sinclair Morris, and Karen Walker

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